



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,196	03/25/2004	Shuichi Noguchi	MIZ73	5993
6980	7590	07/28/2005	EXAMINER	
TROUTMAN SANDERS LLP BANK OF AMERICA PLAZA, SUITE 5200 600 PEACHTREE STREET, NE ATLANTA, GA 30308-2216			HUNTER, ALVIN A	
		ART UNIT	PAPER NUMBER	
		3711		

DATE MAILED: 07/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.	10/809,196	
Examiner	Art Unit Alvin A. Hunter	
	3711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 09 June 2005.  
2a) This action is FINAL.                                    2b) This action is non-final.  
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1-17 is/are pending in the application.  
4a) Of the above claim(s) 10-12 and 15-17 is/are withdrawn from consideration.  
5) Claim(s) 13 and 14 is/are allowed.  
6) Claim(s) 1-9 is/are rejected.  
7) Claim(s) \_\_\_\_\_ is/are objected to.  
8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.  
10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All    b) Some \* c) None of:  
1. Certified copies of the priority documents have been received.  
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) Notice of References Cited (PTO-892)  
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) Notice of Informal Patent Application (PTO-152)  
6) Other: \_\_\_\_\_

## DETAILED ACTION

### ***Election/Restrictions***

Applicant's election without traverse of Group II, claims 13 and 14 in the reply filed on June 9, 2005 is acknowledged.

Claims 10-12 and 15-17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected inventions, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on June 9, 2005.

### ***Priority***

Acknowledgment is made of applicant's claim for foreign priority based on applications filed in Japan on 3/27/2003 and 3/19/2004. It is noted, however, that applicant has not filed certified copies of the Japanese applications as required by 35 U.S.C. 119(b).

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 8, and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Lai et al. (US 2005/0143189).

Regarding claims 1 and 9, Lai et al. disclose a club head for a golf club having a head body with metal and including a crown portion having a plurality of openings, a crown part mounted to the head body so as to close the openings and a support portion provide between the openings and supporting the crown part wherein a placing portion is provided around the openings for placing a peripheral portion of the crown part and the support portion extends inwardly of the opening from the placing portion (See Figure 1 through 10)

Regarding claim 8, an opening is provided to the support portion..

Claims 1, 5, 8, and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Ballow et al. (USPN 6716110).

Regarding claim 1, Ballow discloses a club head having a head body made of a metal having a crown portion with a plurality of openings, a crown part mounted to the head body to close the plurality of openings, a support portion between the openings and supporting the crown part, a placing portion is provided around the openings for placing the periphery portion of the crown part wherein the support portion extends inward of the openings from the placing portion (See Figure 5).

Regarding claim 5, Ballow discloses the body including a sole portion wherein a member inherently having a center of gravity greater than that of the head body is fixed to the sole being that the member is made of a material smaller but heavier than the head body which equates to the member having a higher density than the head body.

Regarding claim 8, Ballow discloses an opening provide to the support portion (See Figure 5).

Regarding claim 9, Ballow discloses a golf club having a club head comprising a head body made of a metal having a crown portion with a plurality of openings, a crown part mounted to the head body to close the plurality of openings, a support portion between the openings and supporting the crown part, a placing portion is provided around the openings for placing the periphery portion of the crown part wherein the support portion extends inward of the openings from the placing portion (See Figure 5).

Claims 1, 2, 8, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Lo et al. (USPN 5624331).

Regarding claim 1, Lo et al. discloses a club head having a head body made of a metal having a crown portion with a plurality of openings, a crown part mounted to the head body to close the plurality of openings, a support portion between the openings and supporting the crown part, a placing portion is provided around the openings for placing the periphery portion of the crown part wherein the support portion extends inward of the openings from the placing portion (See Figures 1-5). It should be noted that a crown part in is broadest reasonable interpretation does not require only one piece.

Regarding claim 2, Lo et al. inherently discloses the crown part made of a material with a smaller specific gravity than the head body, being that Lo et al. disclose the crown part being lighter than the head body, thereby having a lighter density than

the head body. (See Column 3, lines 1 through 20). Lo et al. also disclose the crown part adhered to the head body (See Column 4, lines 3 through 16).

Regarding claim 8, Lo et al. discloses an opening provided to the support portion (See Figure 5).

Regarding claim 9, Lo et al. discloses a golf club having a club head comprising a head body made of a metal having a crown portion with a plurality of openings, a crown part mounted to the head body to close the plurality of openings, a support portion between the openings and supporting the crown part, a placing portion is provided around the openings for placing the periphery portion of the crown part wherein the support portion extends inward of the openings from the placing portion (See Figures 1-5).

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject-matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 4, 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lo et al. (USPN 5624331).

Regarding claim 3, Lo et al. does not disclose the distance in which the placing portion extended, though Lo et al. notes that the club head is to have a low center of gravity. Lo et al. recognizes that having a lower centre of gravity is essential in the performance of the invention and also recognizes that the placing portion is essential in

constructing the invention. One having ordinary skill in the art would have found it obvious to have the the distance of the placing portion extending at any amount so long as the club head have a low center of gravity and the crown part is supported.

Regarding claim 4, Lo et al. discloses the support portion having a thickness of 2 to 20% of the support portions width. Lo et al. notes that the support portion is 3 to 15% of the distance between the heel and toe of the club head and the crown part is 15 to 50% of the total surface area of the club head, which means the opening have the same amount of surface area as that of the crown part. Lo et al. does not explicitly note a value for the total surface area, therefore, one having skill in the art would drawn therefrom that the thickness of the support portion can be of any value so long as the above conditions are met.

Regarding claims 6 and 7, Lo et al. does not explicitly disclose the surface area of the support portion or the openings. Lo et al. notes that the support portion is 3 to 15% of the distance between the heel and toe of the club head and the crown part is 15 to 50% of the total surface area of the club head, which means the opening have the same amount of surface area as that of the crown part. Lo et al. does not explicitly note a value for the total surface area, therefore, one having skill in the art would drawn therefrom that the surface area can be of any value and ratio so long as the above conditions are met.

Claims 1, 2, 8, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lo et al. (USPN 5624331) in view of Lundberg (USPN 5839975).

Regarding claim 1, Lo et al. discloses a club head having a head body made of a metal having a crown portion with a plurality of openings, a crown part mounted to the head body to close the plurality of openings, a support portion between the openings and supporting the crown part, a placing portion is provided around the openings for placing the periphery portion of the crown part wherein the support portion extends inward of the openings from the placing portion (See Figures 1-5). Lo et al. discloses the club head reducing the flexure of the club head, but does not disclose the crown part being of one unitary piece. Lundberg discloses a club head having a unitary crown part reinforced by a crown portion, wherein the crown part closes the openings that would be created by the crown portion (See The entire document). The construction prevents undesirable torque and serves to reinforce the club head (See Abstract). One having ordinary skill in the art would have found it obvious to have the crown part of any number of pieces so long as the flexure of the club head is protected.

Regarding claim 2, Lo et al. inherently discloses the crown part made of a material with a smaller specific gravity than the head body, being that Lo et al. disclose the crown part being lighter than the head body, thereby having a lighter density than the head body. (See Column 3, lines 1 through 20). Lo et al. also disclose the crown part adhered to the head body (See Column 4, lines 3 through 16).

Regarding claim 8, Lo et al. discloses an opening provided to the support portion (See Figure 5).

Regarding claim 9, Lo et al. discloses a golf club having a club head comprising a head body made of a metal having a crown portion with a plurality of

openings, a crown part mounted to the head body to close the plurality of openings, a support portion between the openings and supporting the crown part, a placing portion is provided around the openings for placing the periphery portion of the crown part wherein the support portion extends inward of the openings from the placing portion (See Figures 1-5).

***Allowable Subject Matter***

Claims 13 and 14 are allowed.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alvin A. Hunter whose telephone number is (571) 272-4411. The examiner can normally be reached on Monday through Friday from 7:30AM to 4:00PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Vidovich, can be reached on 571-272-4415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AAH  
Alvin A. Hunter, Jr.



GREGORY VODOVICH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700